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U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

Letter
Circular
LC 754

WASHINGTON

(Supersedes
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SWEEPING COMPOUNDS (ALSO KNOWN AS "FLOOR SWEEP"
AND "DUST DOWN")

This letter circular has been prepared as a result of numerous requests received by the National Bureau of Standards for general information regarding sweeping compounds.

There are on the market many floor-sweeping compounds or preparations made up of sawdust, sand, or ground feldspar, mixed with ingredients such as coloring matter, oil, wax emulsions, disinfectant, etc.; fine sawdust moistened with water is also used for the purpose.

Certain Government offices advise that the following formula makes a satisfactory sweeping compound:

<u>Material:</u>	Parts (by weight)
Fine sand	35
Pine sawdust	40
Paraffin oil	15
Water, and dye if coloring is desired .	10

Some commercial compounds are colored with iron oxide or other pigments and some contain naphthalene flakes, paraffin wax, etc. Essential oils, such as oil of eucalyptus, oil of sassafras, etc., are sometimes added to impart a pleasant odor to the compound or to mask any unpleasant odor of the ingredients used. Pine oil disinfectant, a small amount of creosote oil, and probably other materials can be used as disinfectants.

The water-wax emulsion type of sweeping compound is an outgrowth of the development of the water-emulsion floor waxes. In this type, the mineral oil is replaced by waxes, resins, water, and emulsifying agents. Instead of a thin film of oil on the floor, a film of wax is deposited. The wax type of sweeping compound is intended for use on floorings, such as, linoleum, rubber, asphalt tile, mastic, and polished wood, that may be affected by oils.

Cummings (1) gives the following information on coloring sweeping compounds: Water- or oil-soluble red or green is used. The water-soluble green is malachite green. The water-soluble red is croceine scarlet. The best oil-soluble green is an alizarin oil green, the red is an azo oil red. Where the water-soluble colors are used, the color is dissolved in water and the sawdust is colored first. Then the oil and sand are added afterwards. If the oil-soluble colors are used, the oil is colored first and then mixed thoroughly with the sawdust and the sand is added afterwards. The whole mass is then thoroughly mixed.

Sisal hemp tailings from cordage factories are used, instead of sawdust, in the manufacture of certain sweeping compounds of the mineral oil-sand type. (2)

The Cotton Research Foundation, Memphis, Tenn., has developed a sweeping compound consisting of about 95 1/2 parts by weight of cottonseed hull bran and 4 1/2 parts by weight of paraffin oil. (3)

A recent development is a proprietary non-combustible sweeping compound having an asbestos base.

The Bureau is not in a position to furnish factory plans or data on the cost of materials, mixing machinery, etc. If made in small lots the compounds can probably be mixed satisfactorily by hand. Information on mixing, packaging, and machinery that may be advantageously used can probably be obtained from firms listed in trade directories. An article on the manufacture of sweeping compounds will be found in reference (4).

Government Agencies buy sweeping compound on the latest revision of Federal Specification P-C-591 for "Compound; Sweeping". A copy of this specification can be purchased for 5 cents (postage stamps should not be sent) from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

References

(1) S. N. Cummings, Coloring Soap and Sanitary Products, Soap Blue Book, 1934, p. 136.

(2) See U. S. Patent No. 1,545,571, dated July 14, 1925.

(3) H. S. Olcott, Sweeping Compound, Soap 14, No. 11. 105 (1938).

(4) Anonymous, Sweeping Compounds, Soap 11, No. 4, 91 (1935).